

Rabbit DARPP-32 Polyclonal Antibody | anti-PPP1R1B antibody

Anti-DARPP-32

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA72784	Rabbit	Tested Reactivity: Mouse, Rat Expected Reactivity: Bovine, Canine, Chicken, Human, Non-Human Primate, Xenopus	Immunohistochemistry, Western Blot

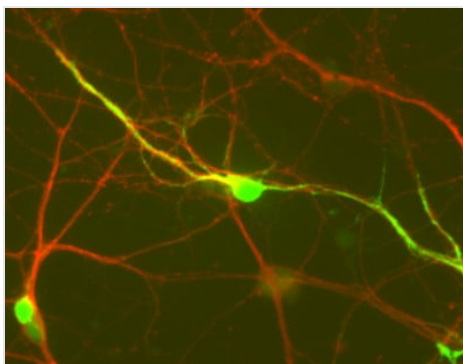
PRODUCT SYNONYMS

DARPP-32; Polyclonal Antibody; Anti-DARPP-32; anti-PPP1R1B antibody

PRODUCT SPECIFICATIONS

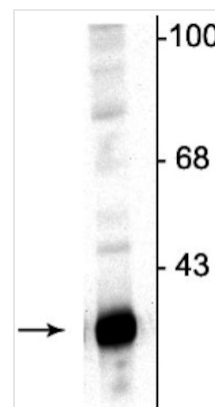
Host	Rabbit
Reactivity	Tested Reactivity: Mouse, Rat Expected Reactivity: Bovine, Canine, Chicken, Human, Non-Human Primate, Xenopus
Clonality	Polyclonal
Specificity	Specific for endogenous levels of the ~32 kDa DARPP-32 protein.
Purity/Purification	Affinity purified from Pooled Serum
Form/Format	10 mM HEPES (pH 7.5), 150 mM NaCl, 100 ug per ml BSA and 50% glycerol.
Sequence Length	205
Applicable Applications for anti-PPP1R1B antibody	IHC (Immunohistochemistry), WB (Western Blot)
Immunogen Information	Synthetic peptide corresponding to amino acid residues from the N-terminal region of rat DARPP-32, conjugated to keyhole limpet hemocyanin (KLH).
Production Note	Prepared from pooled rabbit serum via chromatography on an affinity column prepared with the N-terminal peptide used as antigen.
Preparation and Storage	Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol.

IMAGES



IHC (Immunohistochemistry)

Immunohistochemical staining of cultured CD1 mouse striatal cells showing specific labeling of DARPP-32 (Cat. # 374-DARPP, green, 1:250) and Tuj1 (red). Cells and photo courtesy of QBM Cell Science.



WB (Western Blot)

Western blot of rat hippocampal lysate showing specific immunolabeling of the ~32 kDa DARPP protein.

ADDITIONAL INFORMATION

Related Product Information for anti-PPP1R1B antibody	Description: Affinity purified rabbit polyclonal antibody Target Description: DARPP-32 is a dopamine (DA) and cAMP-regulated ~32 kDa phosphoprotein that is associated with dopaminoceptive neurons (Fienberg et al., 1998). The protein inhibits protein phosphatase I when it is phosphorylated on Thr-34. In contrast, when DARPP-32 is phosphorylated on Thr-75 the protein acts as an inhibitor of PKA (Bibb et al., 1999). Phosphorylation of DARPP-32 is thought to play a critical role in the regulation of dopaminergic neurotransmission. In addition, the activity of DARPP-32 is also thought to play important roles in the actions of alcohol, caffeine and Prozac® (Maldve et al., 2002; Lindskog et al., 2002; Svenningsson et al., 2002).
References	• Bibb JA, Snyder GL, Nishi A, Yan Z, Meijer L, Fienberg AA, Tsai LH, Kwon YT, Girault JA, Czernik AJ, Haganir RL, Hemmings HC, Jr., Nairn AC, Greengard P (1999) Phosphorylation of DARPP-32 by cdk5 modulates dopamine signalling in neurons. Nature (London) 402:669-671. • Fienberg, A.A., Hiroi, N., Mermelstein, P.G., Song, W., Snyder, G.L., Nishi, A., Cheramy, A. O'Callaghan, J.P., Miller, D.B., Cole, D.G., Corbett, R., Haile, C.N., Cooper, D.C., Onn, S.P., Grace, A.A., Ouimet, C.C., White, F.G., Hyman, S.E., Surmeier, D.G., Girault, J., Nestler, E.J. and Greengard, P. (1998) DARPP-32: regulator of the efficacy of dopaminergic neurotransmission. Science 281:838-842. • Lindskog M, Svenningsson P, Pozzi L, Kim Y, Fienberg AA, Bibb JA, Fredholm BB, Nairn AC, Greengard P, Fisone G (2002) Involvement of DARPP-32 phosphorylation in the stimulant action of caffeine. Nature (London) 418:774- 778. • Maldve RE, Zhang TA, Ferrani-Kile K, Schreiber SS, Lippmann MJ, Snyder GL, Feinberg AA, Leslie SW, Gonzales RA, Morrisett RA (2002) DARPP-32 and the regulation of the ethanol sensitivity of NMDA receptors in the nucleus accumbens. Nature Neurosci 5:641-648. • Svenningsson P, Tzavara ET, Witkin JM, Fienberg AA, Nomikos GG, Greengard P (2002) Involvement of striatal and extrastriatal DARPP-32 in biochemical and behavioral effects of fluoxetine (Prozac). Proc Natl Acad Sci USA 99:3182-3187.

NCBI AND UNIPROT INFORMATION

NCBI GI #	61889054
NCBI GeneID	360616
NCBI Accession #	NP_612530.1
NCBI GenBank Nucleotide #	NM_138521.1
UniProt Accession #	Q6J4I0
Molecular Weight	32kDa
NCBI Official Full Name	protein phosphatase 1 regulatory subunit 1B
NCBI Official Synonym Full Names	protein phosphatase 1, regulatory (inhibitor) subunit 1B
NCBI Official Symbol	Ppp1r1b
NCBI Official Synonym Symbols	Darpp32; Darpp-32
NCBI Protein Information	protein phosphatase 1 regulatory subunit 1B; neuronal phosphoprotein DARPP-32; dopamine- and cAMP-regulated neuronal phosphoprotein; dopamine- and cAMP-regulated phosphoprotein DARPP-32
UniProt Protein Name	Protein phosphatase 1 regulatory subunit 1B
UniProt Gene Name	Ppp1r1b
UniProt Entry Name	PPR1B_RAT

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.